

Must ship July 30

Work Order ID 60779

Thursday, July 22, 2010 1:04:13 PM



Page 1

Item ID: D4149-041

Accept



Setup Start



Revision ID:

Item Name: Crosstube Lug Assembly, Aft

Stop



Start Date: 7/22/2010 Start Qty: 4.00

Required Date: 7/29/2010 Req'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: 10-7-22

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D4149 | PAT B 10.07.22 | | | | | | | | |
| 100 | | 0.00 | | | | | | | |
| | | | | | | | | | |
| Small Fab | Memo | 0.00 | | | | | | | |
| Small Fab | 1- Assemble as per dwg | | | | | | | | |
| 110 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 120 | Identify as per dwg & Stock Location: 468 | 0.00 | | | | | | | |
| | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | | | | | | | | | |

10/07/27 (1)

10

10/7/27 (15)

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Work Order ID 60779

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Page 2

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Start Date: 7/22/2010 Start Qty: 4.00

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/07/28 JH

10-7-28
①

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
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NOTE: Date & initial all entries

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NOTE: Date & initial all entries

Picklist Print

Thursday, July 22, 2010 1:04:17 PM

Page 2

Work Order ID: 60779

Parent Item: D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 7/22/2010

Required Date: 7/29/2010

Start Qty: 4.00

Required Qty: 4.00

✓ AN3C12A

Purchased

No

100

Each

44.0000



Bolts

Location

Loc Qty

Loc Code

ST351

44

112314

8

114761

22

115016

14



4 10/07/27

AN4C13A

Purchased

No

100

Each

104.0000



BOLT

Location

Loc Qty

Loc Code

ST357

104

113359

3

114108

1

114442

50

114615

50



1 4 10/07/27

MS20615-4M20 18

Purchased

No

100

Each

322.0000



RIVET

Location

Loc Qty

Loc Code

ST323

322

114808

152

115054

170



3 12 10/07/27

M115037 (34)

Thursday, July 22, 2010 1:04:17 PM

Shop Packet Print

Page 2

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| | | | | | | | | |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Thursday, July 22, 2010 1:04:17 PM

Page 3

Work Order ID: 60779

Parent Item: D4149-041


Parent Item Name: Crosstube Lug Assembly, Aft

Start Date: 7/22/2010

Required Date: 7/29/2010


Start Qty: 4.00


Required Qty: 4.00

✓ MS21043-3 Purchased No 100 Each 2,981.000

 Nut

| Location | Loc Qty |
|----------|---------|
| FG | 76 |
| 103691 | 76 |
| ST301 | 2905 |
| 112314 | 2905 |


Loc Code


4

 86
 4
 10/07/27

✓ MS21043-4 Purchased No 100 Each 1,220.000

 Nut

| Location | Loc Qty |
|----------|---------|
| FG | 40 |
| 104603 | 40 |
| ST301 | 1180 |
| 112492 | 25 |
| 113069 | 8 |
| 114348 | 347 |
| 114523 | 500 |
| 114784 | 300 |


Loc Code

1

 4
 10/07/27

NAS1149C0432R Purchased No 100 Each 730.000

 Washer

| Location | Loc Qty |
|----------|---------|
| ST297 | 730 |
| 114292 | 140 |
| 114742 | 590 |

Loc Code

2

 8
 10/07/27
 2

Thursday, July 22, 2010 1:04:17 PM

Shop Packet Print

Page 3

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Thursday, July 22, 2010 1:04:17 PM

Page 4

Work Order ID: 60779

Parent Item: D4149-041

Parent Item Name: Crosstube Lug Assembly, Aft



Start Date: 7/22/2010

Required Date: 7/29/2010

Start Qty: 4.00

Required Qty: 4.00

✓ NAS1149C0332R

Purchased

No

100

Each

3,480.000



Washer



8 30
EJB 10/07/27
8

Location

Loc Qty

Loc Code

ST297

3480

113524

10

113737

150

115000

3320

Thursday, July 22, 2010 1:04:17 PM

Shop Packet Print

Page 4

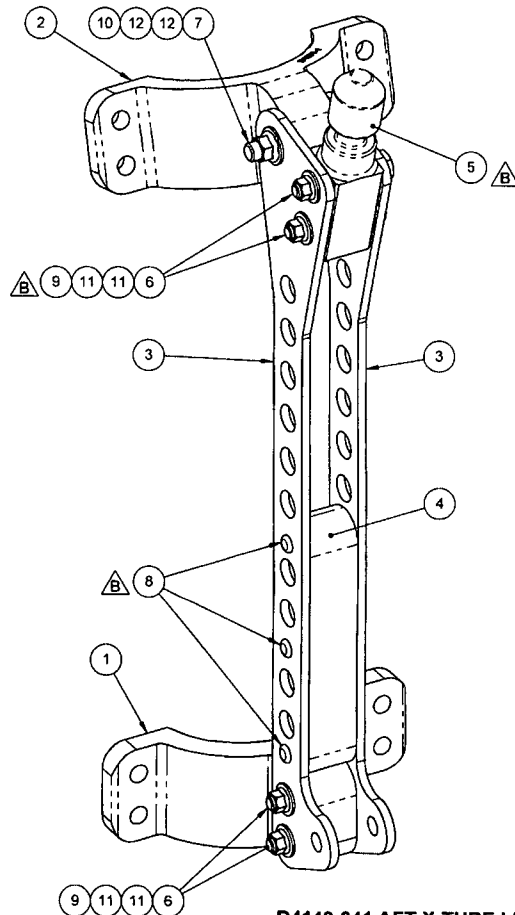
| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



D4149-041 AFT X-TUBE LUG ASSY

NOTES:

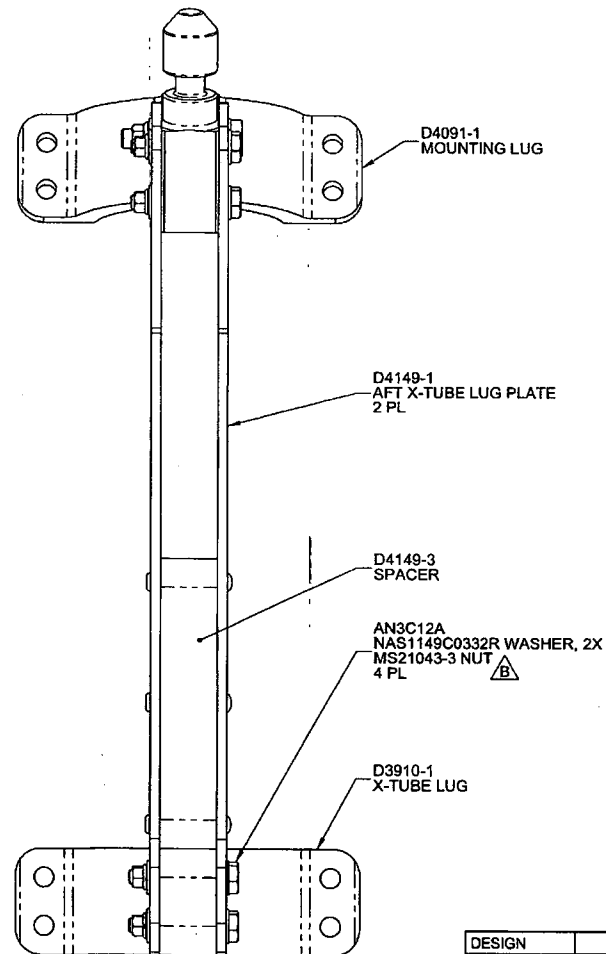
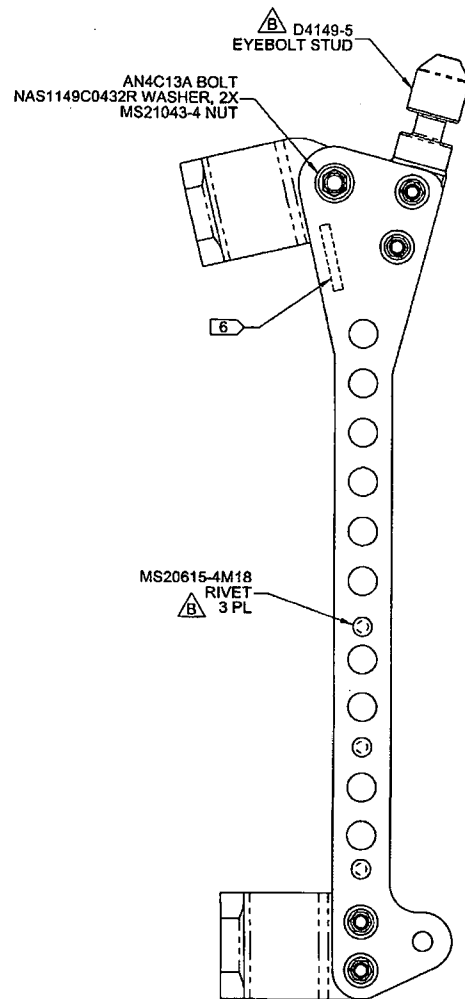
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4149-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 2.17 lbs

| ITEM | QTY | P/N | DESCRIPTION |
|------|-----|---------------|----------------------|
| | X | D4149-041 | AFT X-TUBE LUG ASSY |
| 1 | 1 | D3910-1 | X-TUBE LUG |
| 2 | 1 | D4091-1 | MOUNTING LUG |
| 3 | 2 | D4149-1 | AFT X-TUBE LUG PLATE |
| 4 | 1 | D4149-3 | SPACER |
| 5 | 1 | D4149-5 | EYEBOLT STUD |
| 6 | 4 | AN3C12A | |
| 7 | 1 | AN4C13A | BOLT |
| 8 | 3 | MS20615-4M18 | RIVET |
| 9 | 4 | MS21043-3 | NUT |
| 10 | 1 | MS21043-4 | NUT |
| 11 | 8 | NAS1149C0332R | WASHER |
| 12 | 2 | NAS1149C0432R | WASHER |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 60779
BS10-722

RELEASED
2010-07-16
MP

| | | | |
|--|---|----|----------|
| B | MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); ADDED D4149-5 (SHT 5); D4149-5 WAS D3909-5 (ZN D3-1 & D7-2); REPLACED QTY(5) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, C7-1, B7-2 & B3-2); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN D8-3). REASON: SEE TR-D350-607-2 REV. B. | MB | 10.07.05 |
| A | NEW ISSUE | MB | 10.06.18 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | <i>[Signature]</i> | | |
| DRAWN | <i>[Signature]</i> | | |
| CHECKED | <i>[Signature]</i> | | |
| MFG. APPR. | <i>[Signature]</i> | | |
| APPROVED | <i>[Signature]</i> | | |
| DE APPR. | <i>[Signature]</i> | | |
| DATE | 10.07.05 | | |
| DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4149 TITLE AFT X-TUBE LUG ASSY REV. B SHEET 1 OF 5 SCALE NTS <small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | | | |



D4149-041 AFT X-TUBE LUG ASSY

w/c 6777

RELEASED
2010-07-16

| | | |
|------------|----------|--|
| DESIGN | | DART AEROSPACE LTD |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | | DRAWING NO. D4149 REV. B |
| MFG. APPR. | | SHEET 2 OF 5 |
| APPROVED | | TITLE AFT X-TUBE LUG ASSY SCALE NTS |
| DE APPR. | | |
| DATE | 10:07:05 | |

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